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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/857,628 | 06/07/2001 | Shigeru Umino | 00F00052US | 5155 |

466 7590 09/09/2003

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EXAMINER

LAVILLA, MICHAEL E

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 1775 | 7 |

DATE MAILED: 09/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------|--------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/857,628 | UMINO ET AL. |
| | Examiner | Art Unit |
| | Michael La Villa | 1775 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 16 June 2003.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-6 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-6 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 07 June 2001 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. _____.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

| | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 2. The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
 3. Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has suggested that support for the claim amendment may be found at page 14, lines 7-9, page 15, lines 3-5, and Tables 1, 2, and 3-1. Neither these portions nor others noticed by the Examiner provide support for the invention as now claimed. At page 14, lines 7-9, applicant refers to "certain" metal salts by enumerating anions and metal cations. The discussion at page 15, lines 3-5 is a continuation of the already referred to discussion of specific metal cations and acid anions. These have not been claimed and hence new matter is introduced. The examples exemplify the already referred to metal acid salts, in applicant's nomenclature, and do not suggest a broader teaching. Claim 2 fails to claim the anions and Claim 3 fails to claim the metal cations. Applicant's claim also appears to omit the requirement that these layers, in which both the intermediate

and resin layer include the claimed metal acid salt, are formed from a single treatment application, as discussed, for example, starting at page 12, line 15.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
5. A person shall be entitled to a patent unless –
6. (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
7. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Nagashima et al. USP 6,180,177. Nagashima et al. teaches coating a zinc plated steel sheet with a chromium free treating agent that comprises metal acid salts and organic resin components. Zirconium hydrofluoric acid is described one possible precursor material. See Nagashima et al. (Abstract; col. 5, lines 5-26; col. 7, line 45 through col. 8, line 41; col. 9, line 19 through col. 19, line 15; col. 11, lines 34-60; Tables 1 and 2; and col. 15, lines 55-67). Nagashima teaches forming a distinct interfacial region over which a resin is formed. It would be expected, in analogy to applicant's disclosure, that, inherently, there would form, at the interfacial region, a metal acid salt component and, at the overlayer region, resin mixed with metal acid salt component. Nagashima teaches forming cross-cuts to do adhesions tests. It would be expected that surface regions can be defined to satisfy the claimed percentage coverage of Claim 6. The coatings

of Nagashima are described as being at least 1 g/m², which at 1 g/cm³ density corresponds to 1 micron thickness. Such coatings would be identified with applicant's intermediate and resin layer. Therefore, at the surface interfacial region, that is distinct from the remainder of the coating, a 0.1 micron thickness layer may be defined to meet the claimed terms of the intermediate layer thickness of Claim 5.

Response to Amendment

- I. In view of applicant's amendments and arguments, applicant traverses the section 102 rejection over Ikeno of the Office Action mailed on 16 January 2003. Rejection is withdrawn.
- II. In view of applicant's amendments and arguments, applicant traverses the section 102 rejection over Ogata of the Office Action mailed on 16 January 2003. Rejection is withdrawn.
- III. In view of applicant's amendments and arguments, applicant traverses the section 103 rejection over Ikeno in view of Lee of the Office Action mailed on 16 January 2003. Rejection is withdrawn.
- IV. It is noted that applicant has perfected applicant's priority document by providing a certified translation thereof.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

9. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael La Villa whose telephone number is (703) 308-4428. The examiner can normally be reached on Monday through Friday.
11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (703) 308-3822. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

12. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Michael La Villa
September 7, 2003

A handwritten signature in black ink, appearing to read "Michael La Villa".